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ABSTRACT

The paper examines the literature concerning drug and alcohol abuse among handicapped adolescents. An introductory section noting the relative lack of research on this problem is followed by a review of adolescent drug research identifying longitudinal studies involving more than 70,000 subjects, studies of associated personality variables, and studies of drug abuse among young adults. Studies on handicapped youth and drug use are then reviewed with emphasis on alcohol abuse among the deaf, alcohol abuse among mentally retarded adults, and hyperactive teenagers and alcohol consumption. Special considerations that make drugs particularly hazardous for the disabled include: health risks, drug potentiation, predisposition to mental health problems, relative immaturity and unsophisticated use, peer pressure, thrill seeking behavior, and fantasizing. The nature of special education settings themselves, in their acceptance of deviance and socially retarded behaviors, may contribute in an indirect way to drug use. Finally discussed are the possibly higher prevalence of casual alcohol or drug use among the handicapped than nonhandicapped populations and the possible predisposition to abuse of the disabled. (DB)

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HANDICAPPED ADOLESCENT ALCOHOL AND DRUG USE/ABUSE:

Some causes for concern.

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The last few years have seen a great deal of increased public and governmental attention focused on the problems of alcohol and drug abuse. The diversity of research and treatment efforts is impressive, and within the last year alone, some very specialized but esoteric topics have been pursued. These include the drinking patterns of oil rig workers, female army soldiers, and medical students in India. In spite of the growing literature, relatively little has been published on a large sub-population of this country--the handicapped. Although some research has been undertaken on this topic, the volume is surprisingly low. We have little idea of the prevalence, or incidence of substance abuse among handicapped populations or of the availability of treatment and counseling services for handicapped substance abusers.

When the search for this information is narrowed to adolescent and young adult handicapped individuals, the paucity of available data becomes more critical. This situation is unfortunate as this age group has been consistently identified with both onset of drug use and with more problematic abuse behaviors. At a time when other sub-populations, have been targeted for specific treatment assistance or more broad-based education and intervention, we still do not know the extent to which handicapped adolescents experience alcohol or drug problems compared with their non-handicapped contemporaries.

In 1979 some of the first research and service initiatives in this area were implemented through federal agencies, due in large part to amendments enacted that year to the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment, and Rehabilitation Act of 1970. Specific monies were set aside for the study and treatment of the multidisabled. This terminology was used as a recognition that alcoholism and drug addiction are handicapping conditions in their own

right. At that time the National Institute for Alcoholism and Alcohol Abuse (NIAAA), and other rehabilitation agencies, estimated that the number of individuals with multihandicapped alcoholism and drug problems could nominally be set at 2.8 million Americans, based on a conservative prevalence rate of eight percent (Hindman, 1981). The definition of "disabled" in this case is quite comprehensive, and encompasses many disabilities other than ones of developmental origin; these include work-related injuries, other trauma, etc. Since that time, several specific groups of handicapped people have been estimated to suffer from these conditions at rates possibly in excess of the non-handicapped population, such as physically disabled (Rasmussen and DeBoer, 1981), deaf (Boros, 1979), and mildly retarded (Hepner, Kirshbaum, and Landes, 1981). However, there have been no systematic studies conducted in this vein.

Although additional drug-related research and service is required for the disabled of all ages, it is the youth who have the greatest immediate need. This is not only the time when individuals appear to be most vulnerable to drug and alcohol abuse, but it also represents the age at which a person is at maximum risk for more serious complications from that abuse. Young adulthood for someone who may be socially or maturationally delayed is a very risky time, and becomes more so when further burdened by the damaging sequelae of drug abuse. Alternately, it is an excellent time to provide education and intervention to those at risk.

The degree to which alcohol and drug use has permeated adolescent subcultures is now better understood and appreciated by those outside the educational and treatment communities, due in part to the anti-drug campaigns. The recent "war on drugs" launched by the U.S. government

apparently has assisted in making inroads, not only in stemming the increased incidence of use among high school students, but also in providing children of all ages with better information about the realities which can accompany drug abuse. In spite of the recent attention and funding oriented to this problem, however, there are other findings that suggest this problem will not so easily disappear. Although illicit drug use appears to be down among adolescents (except cocaine), alcohol consumption levels seem relatively stable (N.I.D.A.,1986). This trend is comprehensible considering it is the drug of choice by the majority of adult Americans. Nearly all high school students try some mood altering drug, usually alcohol, by their senior years, and almost 20% of high school seniors report that they continue to get intoxicated on a weekly or biweekly basis (N.I.D.A.,1986)!

A Review of Adolescent Drug Research

A common approach to characterizing adolescent drug use has been to target the demographics around the age of initiation of use, the beginning and progressive drugs of choice, frequency and quanity of drug use, family drug abuse history, and the specific psychoactive effects of various drugs. In several cases, these efforts have indicated that early onset of use is highly correlated with later heavy or pathological consumption (e.g., Kandel,1980). Almost univerally, drug use experimentation begins with cigarettes and alcohol and progresses to illicit drugs via marijuana at a slightly later time. Female drug use continues to increase in prevalence, including cigarette smoking, and this sex tends to progress through problems at an accelerated rate relative to males (Kandel,1978; Mills & Noyes, 1984; McDermott, 1984).

Several longitudinal studies, representing in excess of 70,000 youth have been conducted within the past 15 years. Although the etiologies of

drug abuse progression remain equivocal and sociologically complex, some behaviors have been identified as both antecedent and concommitant to drug use onset and progression. From its broader perspective drug use initiation and social consumption appear to be manifestations of a larger socio-developmental process -- those of peer value adjustment and the rites of passage to adulthood. This passage includes the institutions of family, school, church, as well as peer relations. From this perspective, some investigators have associated adolescent drug use with a decided shift toward peer values, increased rebelliousness, lower school performance, a greater acceptance of lawlessness, lowered religiousity, and a decreased association with the family (Jessor & Jessor, 1978; Jalali, et al,1981; Jurich, et al,1985).

Studies which have focused upon personality variables associated with drug and alcohol use have identified possible psychological variables accounting for increased susceptibility of substance abuse among adolescents. These include lowered self-esteem, feelings of social inadequacy, confusion over sexuality and sexual behavior, and occasionally, incipient psychopathology (Norem-Hebeisen, et al,1984; Kandel, 1980; Jessor and Jessor, 1975). Similar to the concepts introduced by Anna Freud, some of these investigators posit that the stress of adolescence may contribute to behaviors that are frightening and maladaptive, but transient in nature, except that drug use may tend to fixate these trends.

Substance abuse among young adults has been frequently studied. As much of the literature on this age-group is based upon habits of college students, generalization to the larger population is limited. However, findings suggest that although drug and alcohol use can become more entrenched at this age, some previously heavy users begin to curtail

pheir consumption. Data suggest that the college students are sufficiently sophisticated in drug use and already set in their patterns to the degree that they are not an effective target for primary prevention efforts; in fact, more serious cases at this age suggest a pattern of early drug use, often at or before the start of high school. Drug dependency within this age group is difficult to measure, however, partially because heavy use may be normative for some subgroups. Moreover, young abusers without family responsibilities tend not to show the life area impairments of older groups with stronger domestic and occupational ties. Drug use may decline rather sharply for many individuals immediately after entry into the world of work, and generally these people tend not to demonstrate residual problems from the periods of heavy consumption (Chassin,1984).

The number and variety of variables discussed above put into context the complex factors impacting alcohol and drug abuse in youth, and give indications of its pervasiveness in our society. The above factors generate implications about use by handicapped individuals, as well. Lower school performance, heightened sensitivity to peer acceptance, and a greater tolerance for deviance can be construed as more descriptive of some handicapped youth than for their non-handicapped counterparts. Additionally, lowered self-esteem, more confused sexuality issues, and social inadequacy also fall within the areas most commonly confronting the handicapped adolescent (Wolfensberger,1972). Just as these factors may place the handicapped child at greater risk for abuse, the difficulty in locating appropriate employment suggests that normal constraints to continued abuse in adulthood may be less prohibitive for handicapped youth.

Handicapped Youth and Drug Use

Grouping all handicapping conditions together in order to construe a generalization about drug abuse issues is recognized as a somewhat artificial distinction, because there is such a diversity in the psycho-social and environmental milieu represented within this single representation. The relationship of a moderately retarded adolescent with alcohol consumption, for example,appears to be a distinctly different phenomenon than the drinking patterns of a deaf or paraplegic college student. Some disabilities may be more at risk than others, as a function of both drug accessibility and the social functions of its use. The handicapping conditions which may be most vulnerable are posited to be those which are most like the normal population in the ways that peer reinforcement, socialization, and psychological statis are established and maintained. The handicapping conditions considered in this paper include the attention deficit disorders such as learning disability, emotional disabilities, mild and moderate mental retardation, orthopedic disabilities (including spinal cord and post-trauma), and deafness.

There exists only a limited number of quantitative and demographic studies on this topic, and these are dispersed throughout the literature in such a way that comprehensive literature reviews are difficult. A solitary article occasionally can be found in the fields of psychology, rehabilitation, special education, mental retardation, medicine, and in more specialized government publications such as those from The National Institute for Drug Abuse (NIDA). In compiling this paper the above disciplines were searched through the major journals represented in both computer and hard copy indexes and abstracts, usually back through 1976.

The singular most concise treatise on the issues of handicapped individuals and drug and alcohol abuse to date appears to be a special edition of Alcohol Health and Research World published in Winter 80/81.

The entire issue was dedicated to articles on this topic, solicited from a variety of professionals rep: senting several handicapping conditions. These include mild and moderately retarded adults, visually impaired, deaf, spinal cord injuries, mental illness, and epilepsy. Although most articles contained in this edition are devoid of demographic or prevalence statistics, one facility serving physically and mentally disabled adults in Los Angeles, The Center for Independant Living, reports that 25 percent of their clients abuse alcohol or other drugs (Hepner, Kirshbaum, and Landes, 1980). This program establishes these data via a substance abuse screening that is an integral part of the intake procedure. Those clients identified as impaired or at risk are then assigned programmatic components specifically designed to address this problem, including the intervention of a full time staff chemical dependancy counselor.

Individuals who are deaf have received proportionately greater attention in the area of alcoholism, due in part to the work conducted by Boros and his colleagues (Boros and Sanders,1977; Watson, Boras, and Zrimec 1979; Boros, 1980). Boros identifies two unique problems faced by the deaf alcohol abuser. The deaf community tends to be somewhat closed and therefore it maintains subcultural mores distinct from the larger community. These values include a strong stigmatization against drunkenness or drunken behavior, especially when representing itself to the larger, hearing world. These values may actually tend to dampen sensitivity to deaf individuals with drinking problems, and make them more socially isolated in the process. In addition, deaf or hard of hearing persons seeking assistance from treatment agencies often must suffer the inconvenience or frustration of not receiving information in a timely or appropriate manner. Few treatment personnel are even

marginally adept at sign language making communication with drug abusers difficult. (Boros and Sanders, 1977; Watson, Boros, and Zrimec,1979; Boros,1980). Some experts believe that the incidence of alcoholism among the deaf is at least equal to the hearing population (Johnson and Lock,1978).

An increasing number of papers have appeared at conferences on the topic of alcohol abuse among the mentally retarded adult. A salient point in several of these address how a mentally retarded person can be accepted in a heavy drinking environment, such as a bar, far more readily than in other sections of our culture (Selan, 1979). For example, in a study of 414 mentally retarded individuals who had encountered problems with alcohol consumption, Krishef and DiNitto (1981) discovered that the range of problems and the severity of use approximates the normal population. In a subsequent investigation of group care facilities, (DiNitto and Krishef, 1983) they found that approximately one half of the 214 residents polled had used alcoholic beverages prior to the interview, and 33 percent were weekly drinkers. Seven percent of the study sample were daily drinkers and seven percent reported previous problems from drinking where law enforcement officers were involved.

These same reseachers provided additional findings complicating an understanding of drinking by the mentally retarded. In their latter study, self-reports by 23% of the sample stated that they took daily medication, and 30% acknowledged that they experienced an active seizure disorder (DiNitto and Krishef, 1983). Confounding the previously addressed theory of the mentally retarded finding social acceptance within a drinking environment, over half of their sample reported that they did most or all of their drinking at home, and often alone.

The problems associated with spinal cord injury and concomitant alcoholism have been highlighted, and the multiple disability exhibits some unique and particularly troublesome characteristics. In many cases admitted to a unit specifically designed for this population in California it was discovered that the patients had numerous physical complications which were greatly exacerbated by continued alcohol consumption. These included chronic urinary tract infections, decubitus ulcers, malnutrition, and extremely poor personal hygiene (Anderson, 1981). These individuals also were charactarized as acting very defeated and unmotivated for change, even more so than other alcoholic populations. Anderson (1981) concluded that many of the patients seen at the facility received their spinal cord injury as the result of a drug or alcohol-related accident and that their apparent lack of self-esteem prior to the injury made adaptation to the handicap more difficult.

In a study of 119 teens who were either diagnosed as hyperactive or simply "school problems", it was discovered that the hyperactive children reported significantly more alcohol consumption on a monthly basis than the other group when contacted three years after the study had been instigated. When originally questioned at the beginning of the study there were no differences between groups, however. The hyperactive children reported proportionately greater use of other mood-altering drugs during the three year follow up, as well, but the differences were not statistically different (Blouin,Bornstein&Trites;1978). The researchers concluded that hyperactive children are at greater risk for alcohol-related problems than children who simply have difficulty in school for reasons other than hyperactivity. All diagnosed hyperactive children were placed on Ritalin, and the original thrust of this research was to study the differential effects of Ritalin therapy. They

questioned whether state dependent learning could account for the increased use of drugs by the hyperactives, as a function of becoming habituated to the drugged state.

Drug and alcohol abuse also may be exacerbated by handicapping conditions. There are several concerns that may indicate a heightened vulnerability to substance abuse for handicapped youth. The considerations most salient to this point, derived both from the literature search and personal experience, are listed and described below. Although they are presented in numerical order, no specific hierarchy is implied. Each of the following contributory factors is viewed as a risk vector even within non-handicapped populations when it occurs.

Health risks. Many disabled individuals have extenuating health concerns or physical problems which place them at greater risk for serious medical problems. Circulatory, metabolic and neurologic problems are susceptible to exacerbation through drug use, including alcohol. It is a well-established medical fact that drug tolerance often is diminished for individuals with physical problems. In addition to the possibility of reduced tolerances for mood altering drugs, a person with physical problems is also at greater risk for physiologic reactions to those drugs that may be damaging on a long term basis.

Drug potentiation. Many handicapped individuals receive regular medication in order to assist in the management of ongoing health problems, seizures, or pain. Although the sometimes graphic results of mixing prescribed medication with illicit drugs or alcohol is well known to some, many persons are unaware of the dangers inherent in such practices. The disabled population is not always in a position to comprehend the dangers involved with drug potentiation. From another

perspective, self-medication can easily become habitual, and it is easy to envision reasons why a person in physical pain or experiencing social disparagement might turn to drugs for assistance in coping with those problems (Anderson, 1981).

Predisposition to mental health problems. Some handicapping conditions which may be most vulnerable to drug abuse may also be predisposed to poor mental health. Several authors in the field of rehabilitation have commented on this phenomenon, and suggested that some handicapping conditions tend to be circularly reinforced to promote poor mental health (Thurer and Rogers, 1985). Inappropriate behavior generates strong societal responses aimed at control, which beget inappropriate attempts to compensate. The connection between poor mental health and pathological drug use is well-documented, and drug treatment programs respect the unique requirements in dealing with a client who manifests clinical mental health problems. A particularly tenacious aspect of this combination is the way in which mental illness potentiates drug use, and reciprocally, how drug problems exaggerate poor mental health (Hindman,1981). Prognosis for recovery from drug problems decreases exponentially when mental illness is dually diagnosed.

Relative immaturity and unsophisticated Use. Many handicapping conditions suppress or delay emotional maturation. When such an individual uses drugs, the potential outcome of that experience is far less predictable. The normal innerpersonal checks on drug abuse, such as a sense of guilt, frustration,or fear of negative consequences are absent or less differentiated. In many cases the handicapped individual will have less previous social and personal experience upon which to make very important decisions regarding where and how they will employ

mood altering drugs. The possibilities for encountering problems from that use increases proportionately. Career-related values and goals, manifested throughout adolescence via acedemic performance and part-time jobs are less available to the disabled, and therefore one other check on irresponsible use can be missing from their environment.

Peer pressure. Peer pressure is postulated to play a significant role in the initiation and maintenance of adolescent drug use. The disabled person who is in mainstream contact with able-bodied peers may find that peer pressure has greater amplitude in forcing them to do or try things which they ordinarily would not do. Not surprisingly, attitude surveys of high school students have found that peer groups that engage in regular drug use are less critical of their members, and more accepting of deviance, so long as the member is a drug user. Undoubtedly, some mildly handicapped youths find this avenue expedient for social acceptance. Similarly, peer pressure among persons with disabilities also may be a significant factor in their drug use - especially in disabilities that tend to segregate those people from the mainstream for acedemic or accessibility reasons, such as in learning, emotional, or orthopedic disabilities.

Thrill seeking behavior. Just as roller coaster lines at an amusement park are generally populated by adolescents, drug use can be initiated for similar reasons. The disabled with more circumscribed ways of trying new or daring things, may find that drug use is a way of escaping otherwise significant physical or mental incapabilities, and in the bargain, demonstrate to their peers their ability to take risks.

Fantasizing. Tangential to the concept of thrill-seeking is the role of drug use and fantasy. Although less researched in the substance abuse field, this concept has been addressed in the work of cognitive

behaviorists such as Marlatt and Donovan, (1983). They contend that drugs may play an intregal role in maintaining unrealistic expectations or fantasies about an individual's well-being or their efficacy in social situations. It is conceivable that fantasies of well-being or social efficacy can be strong reinforcers for disabled youth. The Bloom County cartoons featuring the Star Trekking adventures of a paraplegic and his wheelchair, armed with imaginary photon torpedoes, is quintessential of this point.

Special education settings. The nature of special education programs may contribute in an indirect way to drug use. Some programs, by their nature, must be accepting of deviance and socially retarded behavior on one hand, while they are continually reinforcing more normally appropriate behaviors on the other. The focus on eliciting more normalized behavior, directly or otherwise, is an ongoing reminder to a youth that he or she is different, but someday may be more normal. By the mere fact that a program is individually tailored to a child, there is a demand for performance and normalization that is less stressed within the regular school environment. By placing the youth in mainstreamed settings, then the demands for academic improvement are accentuated by peer issues of conformity and acceptance. For some youth, it may be possible that the combination of special education and mainstreaming elements create additional pressure on performance. In such a situation, the use of drugs is plausible - as a means of rebellion against the control of the educators, as well as for social acceptance. The theories and research highlighted above suggest that a focus on this issue is indeed timely, and much research remains to be done. There appear to be at least three areas of necessary research

relative to drug and alcohol use and the handicapped. These are in prevalence, etiology, and service.

The Prevalence of Use and Predisposition to Abuse. Two distinct issues emerge when considering the special vulnerabilities that handicapped persons may have relative to drug use and abuse. The first is a speculation that some handicapping conditions may be represented by a higher incidence of casual alcohol or drug use than the non-handicapped population. Categories suchas learning disability and emotional handicap may fit this scenario, but little has been done so far to document any patterns of consumption. The second consideration is the degree of heightened vulnerability that a handicapped person may have for an escalation to abusive consumption once that person begins to use in casual or infrequent ways. Speculations about the drinking patterns of mildly mentally retarded persons appear to fit this latter category, but once again, insufficient data exist for accurate comparisons.

As in any other area of epidemiology which is relatively unknown, the first task is to determine the extent to which various handicapping conditions are troubled by drug and alcohol problems. Basic demographic and statistical research is necessary to establish etiologic and prevalence data. Until the scope of the potential problem is better understood, policies and programs designed will not be sensitive to the similarities, or the possible differences of how drugs and alcohol impact handicapped youth.

Eventually, treatment strategies specifically tailored to handicapped youth may be warranted through prevalence research; however, a great deal more must be known about this area before interventions and services can be designed. At a time when the statistics on national

adolescent use of mood-altering substances is stabilizing, and in some cases declining, it would be a grave mistake to overlook the special vulnerabilities and needs of the handicapped (N.I.D.A., 1985).

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